





Test 1

Question 1:

- **Choose the correct answer:**

a- (3 + 1) ………. N (∈ - ∉ - ⊄ - ⊂)

b- If X is an even number, then x + 2 is ………. number.

(even – odd – prime – otherwise)

c- If x + 2 = 9 , x ∈ N , then x = ………. (15 – 13 – 11 – 7)

d- Area of a triangle its Base = 10 cm , Height = 6 cm is ……….

(60 – 30 – 15 – 84)

Question 2:

A) **Complete to get a true sentence:**

(1) The circumference of a circle with diameter 10 cm is … π cm.

(2) 32 × (64 + 36) = 32 × ………. = ……….

B) Which is greater in area?

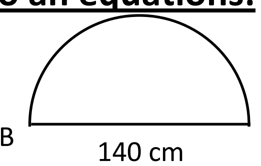
A Triangle it's base is 8 cm and it's height is 6 cm

or A Square the length of its diagonal is 10 cm

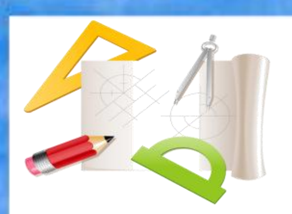
Question 3:

A) **Translate the following verbal statement into an equations:**

Twice a number subtracted 3 from it



B) Find the perimeter of the following figure:







Question 4:

A) In the Cartesian co-ordinates plan determine the points A (2 , 2) , B (5 , 2) , C (5 , 8) , D (2 , 8).

B) The following table shows the marks of 40 pupils in the Math Exam:

Sets	10 -	20 -	30 -	40 -	50 -	Total
Frequency	5	7	12	A	7	40

(1) Find the value of A
(2) Represent the data by frequency polygon







Test 2

Question 1:

- **Circle the true answer:**

a- If the longest chord in a circle is 14 cm. then the circumference is …… cm (88 , 44 , 22 , 11)

b- The sum of two natural numbers ………… N (∈ - ∉ - ⊄ - ⊂)

c- If x + 3 = 5 , then x = ………… (1 , 2 , 3 , 4)

d- The area of a triangle whose base length is 10 cm and height is 5 cm is ………… cm^2 (40 , 25 , 60 , 70)

Question 2:

- **Complete:**

a- If x between 5 and 9 , then x = …………

b- The additive identity is ………… but the multiplicative identity is …………

c- The set of natural numbers (N) – the set of even numbers (E) = ………

d- If x is odd number then x + 4 = …………

Question 3:

- **Use the properties of "commutative", "Associative", "Distribution" to find:**

  a- 372 × 101

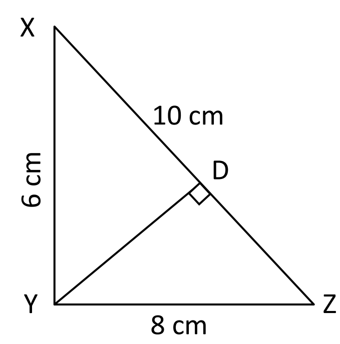
  b- 8 × 582 × 125

  c- 208 + 73 + 792 + 27

Question 4:

A) Δ XYZ is a right angle at Y , XY = 6 cm , YZ = 8 cm , ZX = 10 cm .

Find the length of $\overline{YD}$



B) Write the relation between A and B if B greater than twice A by 10

Question 5:

A) In 2-dimensional coordinate plane:

Draw the triangle ABC where A (2 , 1) , B (5 , 1) , C (5 , 5)







Test 3

Question 1:

- **Complete:**

a- The multiplicative neutral element in N is ……… but the additive neutral element in N is ………

b- The sum of two numbers is 18 one of them is x then the other is ………

c- N – E = ……… , E ∪ O = ……… , E ∩ O = ………

d- 54 + (35 + ………) = (54 + ………) + 28

Question 2:

- **Choose the correct answer:**

a- Twice the number x subtracted 5 from it = ………

(x – 5 or 2x + 5 or 2x – 5 or 5 – 2x)

b- (48 ÷ 8) ………. N (∈ - ∉ - ⊄ - ⊂)

c- If x = { x : x ∈ N , 3 < x ≤ 6 } then x = ………

({ 4 , 5 } , { 3 ,4 ,5 ,6 } , { 3 ,4 ,5 } , { 4 ,5 ,6})

d- The diameter of the circle whose circumference = 44 cm equals … cm

(28 or 21 or 7 or 14)

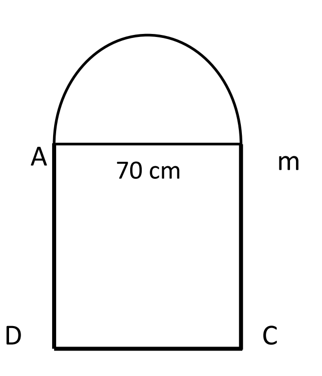
Question 3:

A) Which is greater in area?

The rectangle whose two dimentions 4,5 or the square whose one of its diagonals is 8 cm

B) Calculate the perimeter of the opposite figure where

AM = 70 cm ($= \frac{22}{7}$)



Question 4:

A) The following table shows the wages of 50 workers in a factory:

Wages	10 -	20 -	30 -	40 -	50 -	60 -	70 -	Total
Number of workers	3	6	10	15	8	5	3	50

Represent the data by frequency polygon



Test 4

Question 1:

- **Choose the correct answer:**

a- $8 + 18 \div 6 \times 5 - 20 =$ ……… (2 , 25 , 3 , 10)

b- If $x = \{ x : x \in N , 2 \leq x < 3 \}$, then $x \in$ …… ($\emptyset$, { 2 , 3 } , { 2 } , { 3 })

c- The radius of the circle whose perimeter is 88 cm equal …… cm

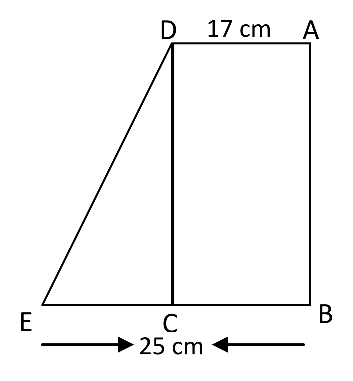
(7 , 14 , 28 , 56)

d- Twice a number x subtracted 3 from it … ($x - 3$, $2x + 3$, $2x - 3$, $3 - 2x$)

e- If x is an odd number then $x + 2$ …… (even , odd , prime)

Question 2:

A) In the opposite figure:



ABCD is rectangle its area 544 cm^2

$E \in \overrightarrow{BC}$, AD = 17 cm , BE = 25 cm

Find the area of Δ DCE

B) If $x = \{ x : x \in N , x \leq 7 \}$ use the listing method to write x then represent its elements on a number line.







Question 3:

A) The length of the diameter of the wheel of a bicycle is 28 cm.

Calculate the covered distance if the wheel turns one turn and what the number of turns to cover distance 132 meter (where $\pi = \frac{22}{7}$)

B) If the age of a man now is x years where x ∈ N find:

1) The age of the man after 10 years
2) The age of the man since 7 years ago

C) Find the diagonal of a square its area is 24.5 cm^2

Question 4:

- **Complete:**

a- The multiplicative natural in N is ....

b- The set of even numbers (E) – the rest of odd numbers (O) = ...

c- If a number × exceeds twice the number y by 7 = ...

d- 316 × 1001 = ... (use distribution property)

e- (5 – 7) .... N (∈ - ∉ - ⊄ - ⊂)

f- A rectangle in which , the length is more than its width by 4 cm if the length of the rectangle is x cm then the width = ... cm

g- The length of a rectangle exceeds the width by S , if the width of the rectangle = x cm , then its length = ... cm

Question 5:

A) **Which is greater?**

A square whose diagonal is 10 cm long or the right-angled triangle in which the length of the sides of the right angle are 8 cm and 15 cm.

B) **In the two dimensional co-ordinates determine the points A (2 ,5) , B (5 , 2) , C (5 , 8), then find the length of $\overline{BC}$ by measuring .**





Answer Test 1

1- a. ∈ b. even c. 7 d. 30

2- A) 1) 10

2) 100 , 3200

B) A of Triangle = $\frac{1}{2}$ × b × h = $\frac{1}{2}$ × 8 × 6 = 24 cm^2

A of square = $\frac{1}{2}$ × d × d = $\frac{1}{2}$ × 10 × 10 = 50 cm^2

Area of square > Area of triangle

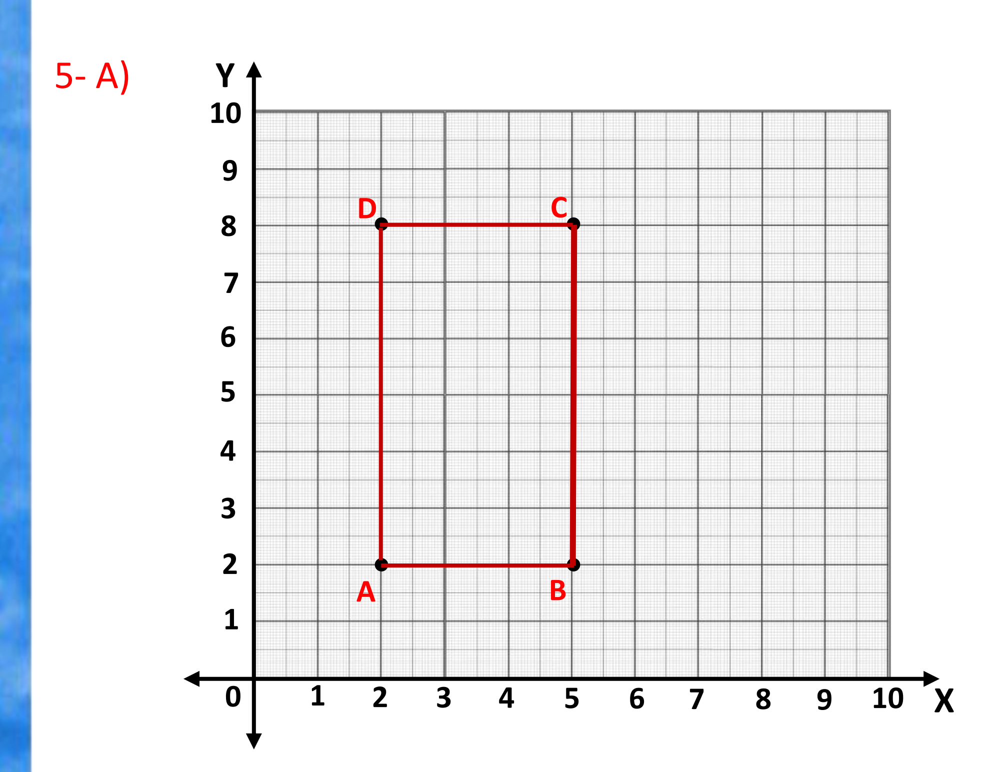
3- A) 2X – 3

B) C = $\pi\ d$ = $\frac{22}{7}$ × 140 = 440 cm

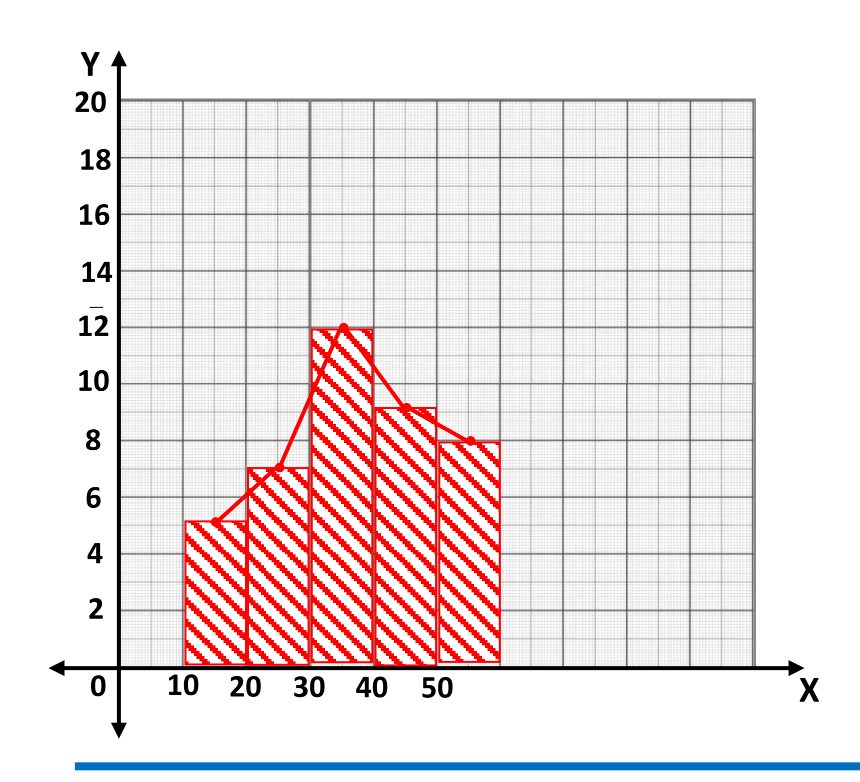
$\frac{1}{2}$ C = $\frac{440}{2}$ = 220 cm

P = 220 + 140 = 360 cm

5- A)



B) the value of A = 9







Answer Test 2

1- a. 44 b. ∈ c. 2 d.25

2- a. {6,7,8} b. 0 , 1 c. O d. odd

3- (a) 372 × (100 + 1)
= 372 × 100 + 372 Distribution
= 37200 + 372 = 37572

(b) (8 × 125) × 582 Commutative & Associative
1000 × 582
582000

(c) 208 + 792 + 73 + 27 Commutative

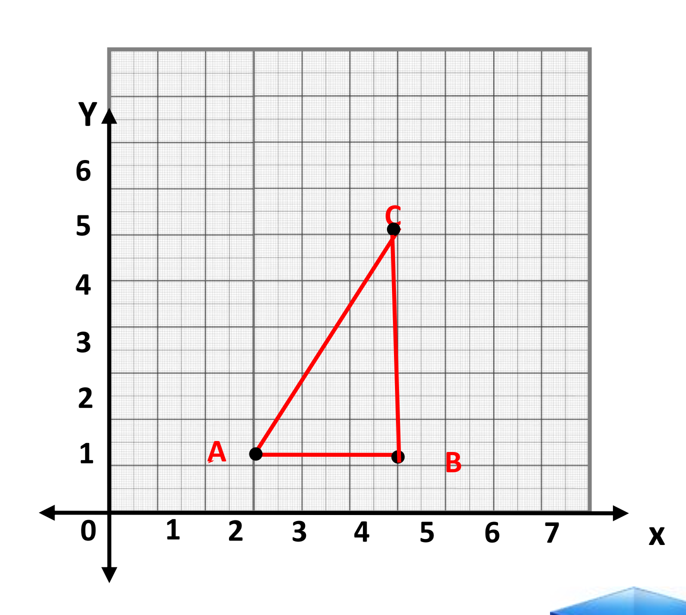
(208 + 792) + (73 + 27) Associative
1000 + 100 = 1100

4- (a) Area = $\frac{1}{2}$ × base × height

= $\frac{1}{2}$ × 6 × 8 = 24 cm^2

DY = $\frac{2\times area}{base} = \frac{2\times 24}{10}$ = 4.8 cm

(b) B - 2A = 10







Answer Test 3

1- a.1-o b. 18 - x
c. O – N - Ø d. 28 – 35

2- a. 2x – 5

b. ∈ c. { 4 , 5 , 6 } d. $44 \times \frac{7}{22} = 14$ cm

3- A) Area of rectangle = L × w = 4 × 5 =20 cm^2

Area of square = $\frac{1}{2} \times d \times d = \frac{1}{2} \times 8 \times 8 = 32$ cm^2

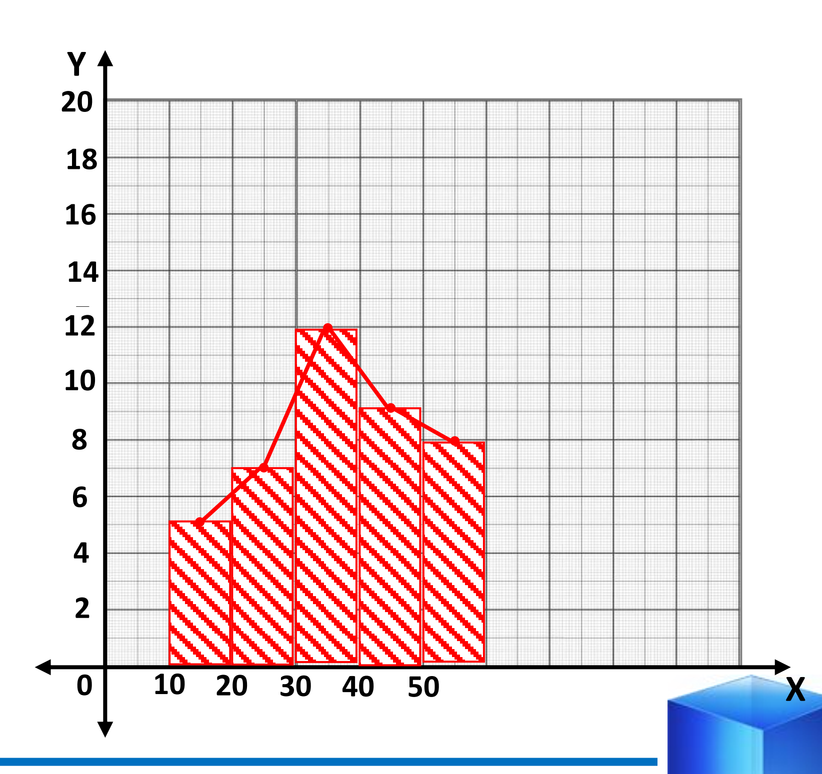
Area of square > Area of rectangle

B) Perimeter = $\frac{1}{2}$ circumference + 70 + 70 + 70

$= \left(\frac{1}{2} \times \frac{22}{7} \times 70 \right) + 210 = 110 + 210 = 320$ cm

5- A)

B) the value of A = 9



Answer Test 4

1- a. $8 + (3 \times 5) - 20$

$8 + 15 - 20 = 23 - 20 = 3$

b. {2}

c. $r = \frac{C}{2\pi}$

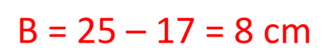
$r = \frac{88}{2 \times \frac{22}{7}} = \frac{88 \times 7}{2 \times 22} = 14$ cm

d. $2x - 3$

e. odd

2- (1) A ▭ = L × W

$544 = L \times 17 \rightarrow L = \frac{544}{17} = 32$ cm



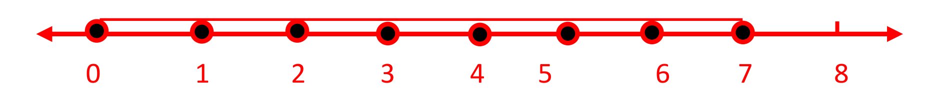
B = 25 – 17 = 8 cm

A Δ = $\frac{1}{2}$ × Base × heights

$= \frac{1}{2} \times 8 \times 32 = 128 \text{ cm}^2$



(2) { 0 , 1 , 2 , 3 , 4 , 5 , 6 , 7 }



3- (A) $c = \pi d$

$= \frac{22}{7} \times 28 = 88$ cm

132 m = 13200 cm

The number of turns = $\frac{13200}{88}$ = 150 turns





(B) * x + 10

* x – 7

c- $d_1 \times d_2 = 2A$

$d_1 \times d_2 = 2 \times 24.5$

$d_1 \times d_2 = 49$

d = 7 cm

4- (a) 1

(b) E

(c) x = 2y + 7

(d) 316 × (1000 + 1)

316 × 1000 + 316 × 1 (distribution)

316000 + 316 = 316316

(e) $\notin$

(f) x – 4

(g) X + S

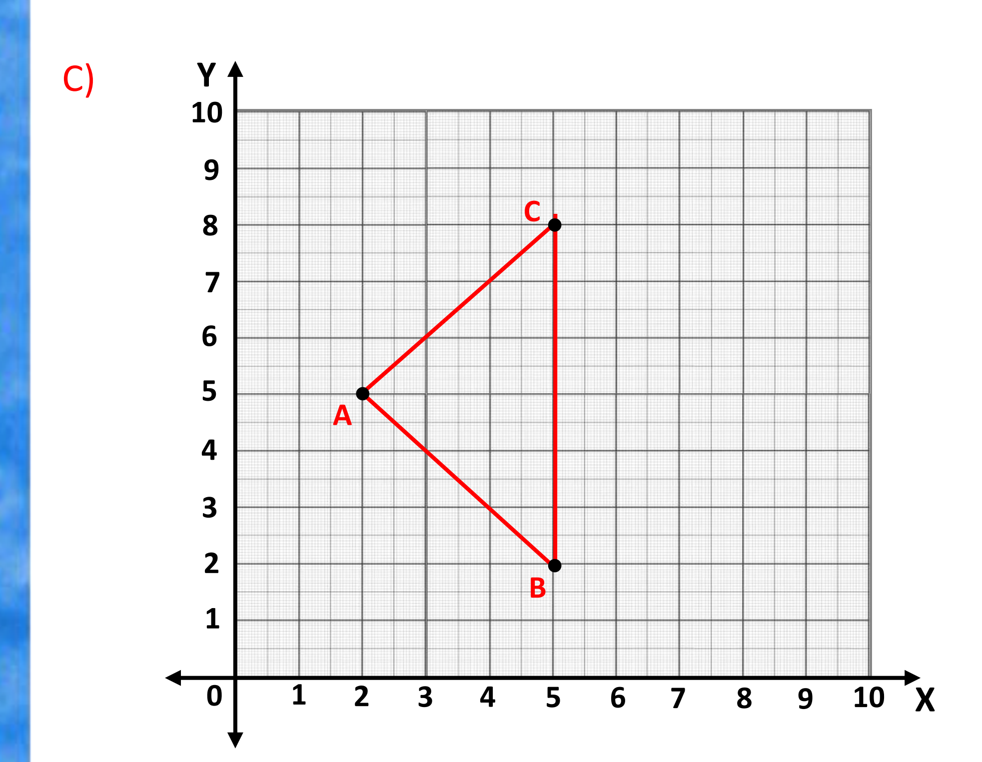
5- A) Area of square = $\frac{1}{2} \times d \times d$

$= \frac{1}{2} \times 10 \times 10 = 50\ cm^2$

Area of triangle = $\frac{1}{2} \times H \times B = \frac{1}{2} \times 8 \times 15 = 60\ cm^2$

Area of triangle > Area of square

C)



Bc = 6 units

Good luck

